REMARKS

Claims 1-28 are pending in the application. Claim 9 has been amended. Applicants acknowledge the Examiner's finding of allowable subject matter in Claims 2, 3, 7-10, 12-15, 19 and 20. Support for all amendments can be found in the specification as originally filed.

Claim Objections

Claim 9 stands objected to as containing informalities in the Claim language. Applicants have amended claim 9 to attend to the Examiner's objections. Reconsideration of the Examiner's objections is respectfully requested.

REJECTIONS UNDER 35 USC 102(b)

Claims 1, 4, 17 and 18 stand rejected under 35 USC 102(b) as being anticipated by Reilly et al. (hereinafter "Reilly").

It is well settled that in order for a prior art reference to anticipate a claim, the reference must disclose each and every element of the claim with sufficient clarity to prove its existence in prior art. The disclosure requirement under 35 USC 102 presupposes knowledge of one skilled in art of claimed invention, but such presumed knowledge does not grant license to read into prior art reference teachings that are not there. See *Motorola Inc. v. Interdigital Technology Corp.* 43 USPQ2d 1481 (1997 CAFC). It is also well-settled that a 35 USC 102 rejection must rest upon the literal teachings of the reference and that the teachings must disclose every element of the claimed invention in as complete detail as is contained in the claim (See. *Jamesbury Corp v. Litton Industrial Products, Inc.* 225 USPQ, 253, 256 (CAFC 1985); *Kalman v. Kimberly-Clark Corp* 218 USPQ 781, 789 (Fed. Cir. 1983)).

Reilly discloses that:

In summary, a new and improved system by which an injection syringe, such as the syringe 22 in the embodiment of FIGS. 1-8, readily can be mounted upon and/or

removed from the front wall 24 of the injector housing 26, has been disclosed. For this purpose, the first readily releasable mechanism 28, by which the syringe 22 is attached to or removed from the injector housing front wall 26, and the second readily releasable mechanism 42, by which the plunger 38 of the syringe is drivingly connected to or released from the drive member 48 of the injector 27 cooperate to produce their respective connections and disconnections simultaneously." (*Emphasis Added*, Col. 8, lines 52-64).

Therefore, Reilly discloses a system that requires the connections of (1) the syringe 22 and injector wall 26 and (2) the plunger 38 and drive member 48 occur at the same time. This is very different from Applicants' invention. Applicants' invention includes a novel feature that "[u]pon secure connection of syringe 100 to injector 200 ... a preferably releasable connection between plunger 110 and piston 220 is preferably made." (Specification, page 12, lines 15-17). Therefore, the connection of plunger and piston is completed, once the syringe and injector are connected. One non-limiting example of the connection of the syringe and injector prior to the connection of the plunger and piston of Applicants' invention is that:

> During loading of syringe 100 onto injector 200, an operator inserts the rear portion of syringe 100 within opening 232 in face plate 240 so that, for example, one or more guide or stop members 140 are aligned with corresponding slot(s) 260 formed in face plate 240. Retainer 230 may include a sensor bank 264 (seated, for example, in seating area 266 formed in face plate 240) including a loading sensor or sensors 270 to sense the presence of syringe 100 and begin rotation of retaining member 250 to draw syringe 100 rearward with the opening in face plate 240 and create a secure engagement between syringe 100 and injector 200. (Specification, page 10, lines 15-26).

Therefore, Reilly does not teach all of the elements of Applicants' invention including "a drive member disposed in the housing and powered by the motor, the drive member operable to automatically advance and engage the plunger when the syringe is mounted on the injector." Accordingly, reconsideration of the rejection is requested.

Claims 4, 17 and 18 depend from Claim 1, which as discussed herein is believed to be allowable. Thus, Claims 4, 17 and 18 are also believed to be allowable.

Further, with regard to Claim 4, Reilly does not disclose stopping advancement

of the drive member upon engagement of the drive member with the plunger of the syringe. In Reilly, the drive member does not advance to connect to the plunger, rather the drive member is at a predetermined positioned, either retracted or advanced, relative to the pressure jacket, and at the position simultaneously when the syringe is connected to the injector, and thus is positioned at the correct location to engage. (See Reilly Col. 8, lines 3-7 and lines 30-34). In fact Reilly discloses that "...having the syringe plunger 38' and the drive member 48' in their forward positions, as shown in FIG. 10, has several advantages over the rearward position arrangement of FIG. 9, from a time standpoint. For example, since the syringe plunger 38' and the drive member 48' are already in their forward positions, it is not necessary to move them forward in preparation for a syringe-filling operation; rather, the plunger and the drive member can immediately be retracted for this purpose." (Reilly, col. 8, lines 36-40). Accordingly, reconsideration of Claims 4, 17 and 18 is respectfully requested.

REJECTIONS UNDER 35 USC 103

Claims 4, 5, 6, 11 and 16 stand rejected under 35 USC 103(a) as being unpatentable over Reilly in view of Mandro. This rejection should be withdrawn in view of the remarks made hereinabove.

It is well settled that to establish a *prima facie* case of obviousness, the USPTO must satisfy all of the following requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine references. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification does not have a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in the art at the time the invention was made. *Amgen v. Chugai Pharmaceutical Co.* 18 USPQ 2d 1016, 1023 (Fed Cir, 1991), *cert. denied* 502 U.S. 856 (1991). Third, the prior art reference or combination of references must teach or suggest all of the limitations of the claims. *In*

re Wilson, 165 USPQ 494, 496, (CCPA 1970).

With regard to Claim 4, as discussed Reilly teaches that the position of the drive member does not advance to connect to the plunger, rather the drive member is at a predetermined positioned, either retracted or advanced, relative to the pressure jacket, and at the position proximate to the plunger simultaneously when the syringe is connected to the injector, and thus is positioned at the correct location to engage. Thus, Reilly teaches away from Applicants' invention because the position of the drive member does not need to be adjusted or advanced.

With regard to Claims 5, Claim 5 is directed to "the plunger engagement detection device comprises a motor current measuring device operably associated with the motor for measuring motor current, the motor current being affected by increased resistance to advancement of the drive member upon engagement thereof with the plunger of the syringe." Thus, the detection device senses increased resistance to the drive member which is very different from Reilly. Reilly, as discussed predetermines the position of the drive member, and therefore does to advance so there is no need to detect movement of the drive member by increased resistance. Additionally, Mandro fails to remedy the deficiencies of Reilly. The Office Action alleges that Mandro teaches a plunger engagement detection device including that the "plunger actuator and syringe plunger are in contact based on the current drawn by the motor. However, Mandro teaches that a "sensor is provided for sensing both the position of the plunger 26 relative to the barrel and the capture of the plunger in the syringe driver." (Abstract, lines 7-10). Further, Mandro teaches that :

> Referring to FIGS. 1 and 2, when the syringe 22 is properly loaded onto the infusion pump 10 the syringe plunger 26 contacts the plunger seat 32. The plunger clamp 34 is biased toward the plunger seat 32 and captures the syringe plunger 26 in the plunger seat 32. When the syringe plunger 26 is properly captured in the plunger seat 32, the pin 38 is positioned in the middle section 36b of the slot 36 such that the wiper 44 operatively contacts the linear potentiometer 46 as shown in FIGS. 4 and 11. (Col. 4, lines 51 to 59).

Thus, Mandro is merely sensing when the syringe plunger 26 contacts the plunger seat 32. This is very different from Applicants' invention where the "motor current is affected

by increased resistance to the advancement of the drive member upon engagement thereof with the plunger of the syringe." It is important to note the "syringe plunger" 26 of Mandro is not similar to the plunger 110 of Applicants' invention. And, with this difference is mind, Applicants' novel feature of sensing resistance is the resistance between the plunger 110 and drive member or piston 220. (see Specification, page 14, lines 17-19). Thus, neither Mandro nor Reilly, alone or in combination teach or suggest Applicants' invention.

With regard to Claim 6, Claim 6 is directed to the detection device including "a sensor operable to detect engagement of the drive member with the plunger." Neither Mandro nor Reilly teach such a device.

Claims 4, 5, 6, 11 and 16 depend from Claim 1, which as discussed herein is believed to be allowable. Thus, Claims 4, 5, 6, 11 and 16 are also believed to be allowable. Accordingly, reconsideration of Claims 4, 5, 6, 11 and 16 is respectfully requested.

NEW CLAIMS

New Claims 1-28 have been added. In particular, Claim 21 is based on claims 1, 6 and 7. Claims 22, 23 and 24 are based on claims 8, 9, and 10, respectively. Claim 25 is based on Claims 1, 11 and 12. Claims 26, 27 and 28 are based on Claims 13, 14 and 15, respectively. The new claims include allowable subject matter, and no new matter has been added.

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In view of the above amendments and remarks, Applicants submit that the claims are in condition for allowance and the Examiner would be justified in allowing them.

Respectfully submitted,

By _____
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July 2, 2007

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

Susan M. Lloyd
Name of applicant, assignee or Registered Representative

Signature

July 2, 2007
Date